

## CLAIMS

We claim:

1. A collaboration space, comprising:

a place comprising a plurality of rooms linked by pointers;

a member directory for said place identifying users authorized to enter said place; and

each said room comprising one or more pages, and for each said room a members object for identifying members authorized to access said room and for each member a level of authorization.

2. The collaboration space of claim 1, said levels of authorization including manager, author, and reader.

3. The collaboration space of claim 1, said rooms including a parent room and a child room, and said pointers

5 comprising forward and backward pointers for enabling the  
6 security of each said room to be independently managed.

1 4. The collaboration space of claim 3, each said forward  
2 pointer further comprising a readers field, said readers  
3 field including an access authority for each reader  
4 authorized to enter said room.

1 5. The collaboration space of claim 3, each said forward  
2 pointer being secure pointer.

1 6. The collaboration space of claim 5, each said forward  
2 pointer carrying the same security as that of the subroom to  
3 which it points.

1 7. The collaboration space of claim 6, further comprising  
2 a display for presenting to a specific user viewing a parent  
3 room a listing of its subrooms, said listing including for  
4 said specific user only those subrooms for which a readers  
5 field in said forward pointer includes an entry authorizing  
6 access by said specific user.

1 8. A database access control system, comprising:

2 an access control list for specifying users who can or  
3 cannot access said database;

4 for users authorized to access said database, said  
5 access control list further specifying access levels  
6 and roles determining the specific actions said users  
7 are authorized to perform, said roles including reader,  
8 author, and manager;

9 a form selectively including a form access list;

10 said database including one or more documents created  
11 from said form;

12 said form access list identifying users authorized to  
13 read documents created from said form;

14 each said document including a document access field  
15 selectively including a readers field and an authors  
16 field for controlling who can read or modify said  
17 document; users identified in any said form access list  
18 for said form from which said document was created

19 being included in said readers field;

20 entries in said readers field granting authorization to  
21 an individual user equal to or less than the  
22 authorization for said individual user in said access  
23 control list; and

24 entries in said authors field selectively granting  
25 authorization to a user authorized as an author in said  
26 access control list to edit a document which said  
27 author creates.

1 9. A method for controlling access to rooms within a  
2 collaboration place, comprising the steps of:

3 maintaining for said collaboration place an access  
4 control list identifying those users authorized to  
5 enter said place;

6 providing pointers linking said rooms within said  
7 place, said pointers including forward pointers having  
8 a readers field;

9 displaying a parent room to a specific user, said

10 parent room including a list of children rooms for  
11 which said readers fields authorize said specific user  
12 access.

1 10. A method for creating a child room within a  
2 collaboration place data base, comprising the steps of:

3 providing for said data base an access control list  
4 identifying users authorized to access said data base;

5 providing for said child room a back pointer to a  
6 parent room; and

7 providing at said parent room for said child room a  
8 forward pointer from said parent room, said pointer  
9 including a readers access field listing users  
10 authorized to access said child room.

1 11. The method of claim 10, further comprising the steps  
2 of:

3 limiting reader access in said readers access field to  
4 said child room for a specific user to no more than the

5 access granted said specific user in said access  
6 control list.

1 12. The method of claim 11, further comprising the step of  
2 initially including in said readers access field for a  
3 child room created from a form users identified in a  
4 form access list identifying users authorized to read  
5 rooms created from said form.

1 13. A program storage device readable by a machine,  
2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for controlling access to  
4 rooms within a collaboration place, said method steps  
5 comprising:

6 maintaining for said collaboration place an access  
7 control list identifying those users authorized to  
8 enter said place;

9 providing pointers linking said rooms within said  
10 place, said pointers including forward pointers having  
11 a readers field; and

12 displaying a parent room to a specific user, said  
13 parent room including a list of children rooms for  
14 which said readers fields authorize said specific user  
15 access.

14. An article of manufacture comprising:

1 a computer useable medium having computer readable  
2 program code means embodied therein for controlling  
3 access to rooms within a collaboration place, the  
4 computer readable program means in said article of  
5 manufacture comprising:  
6

7 computer readable program code means for causing a  
8 computer to effect maintaining for said collaboration  
9 place an access control list identifying those users  
10 authorized to enter said place;

11 computer readable program code means for causing a  
12 computer to effect providing pointers linking said  
13 rooms within said place, said pointers including  
14 forward pointers having a readers field; and

15 computer readable program code means for causing a

16 computer to effect displaying a parent room to a  
17 specific user, said parent room including a list of  
18 children rooms for which said readers fields authorize  
19 said specific user access.

a3 1 15. A computer program product or computer program element  
2 for controlling access to rooms within a collaboration place  
3 according to the steps of:

4 maintaining for said collaboration place an access  
5 control list identifying those users authorized to  
6 enter said place;

7 providing pointers linking said rooms within said  
8 place, said pointers including forward pointers having  
9 a readers field;

10 displaying a parent room to a specific user, said  
11 parent room including a list of children rooms for  
12 which said readers fields authorize said specific user  
13 access.